NephSystem N330 Software User's Guide

- For PC Application

Rev. 2.0.0.3

Quick Start Guide
Chapter I
USB Driver Installation

Thank you for choosing N330 Bluetooth Featured 13.56MHz RFID Scanner from NephSystem Technologies. Before you start to use the RFID device please read the following instructions carefully:

NOTE: N330 supports both of wired USB and wireless Bluetooth communications. The following chapter explains how to use N330 with desktop PC via the USB connection.
For the use of Bluetooth, please refer to page for details.

❖ Install the software provided on the CD-ROM, before connecting your RFID Reader to the PC.

❖ To install the software you need a PC that operates Microsoft Windows XP or Windows 2000.

❖ The RFID device will need charging for at least 2 hours before use at the first time.

❖ Insert the product CD which is coming with the N330 and connect the reader with PC via the default Mini-USB cable.

❖ Power on the reader by switching on the power-button on the side of N330.

❖ At this stage, the "*Found New Hardware Wizard*" will be popping- up on the screen. Choose the last option and click "Next". See the following picture.

Figure 1.0

❖ Select "*Install from a list or specific location*" then click "*Next*" to go into the next step. See the following picture:
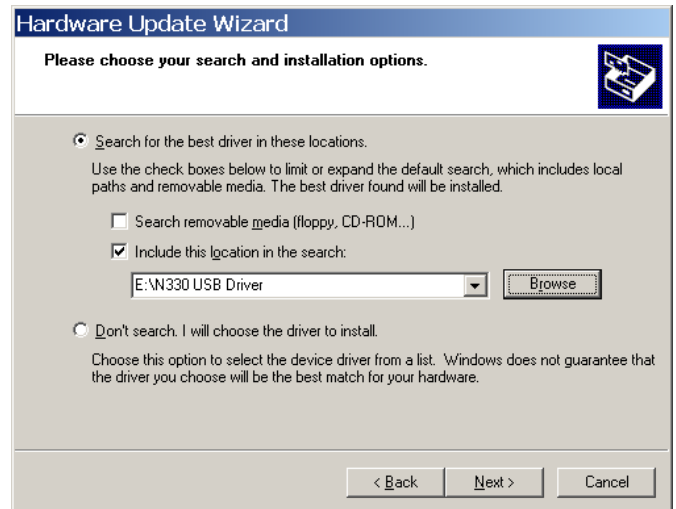

Figure 1.1

❖ The default USB driver is located at "*product CD*" -> "*N330 USB Driver*". After point to this driver location. PC will automatically install the proper USB drivers.

❖ To verify if the proper driver is installed on the PC successfully, right-click "*My Computer*" -> "*Properties*" -> "*Device Manager*" -> "*Ports*". An specific USB to Serial Port is supposed to be There indicating the driver was installed success -fully. See the following picture for details:
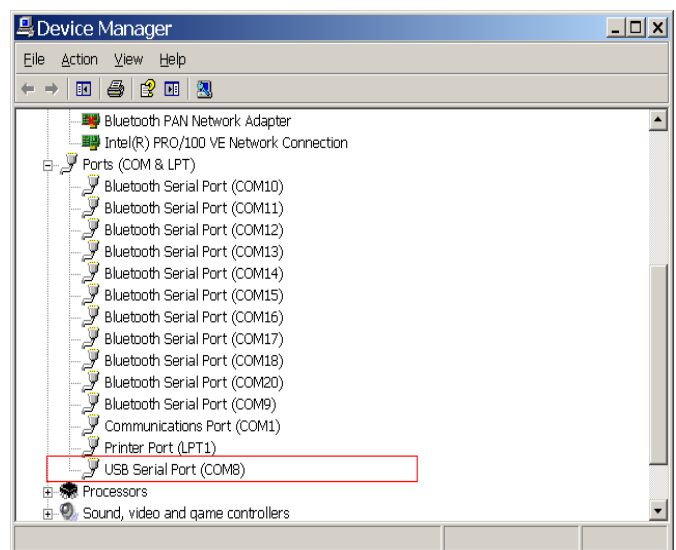

Figure 1.2

❖ Insert the N330 product CD into the CD drive. manually run the "*N330 PC Setup.exe*" file found on the CD.

❖ The default installation directory on the PC is "*C:/Program Files/NephSystem Technologies/N330PC.exe*". User may also find a shortcut on the desktop.

❖ Double click "*N330*" to enter into the application software.

❖ For the first time of running this software, there is a Com port setting panel will be automatically popped up and users need to manually assign the proper Com port to the software. See the picture below.
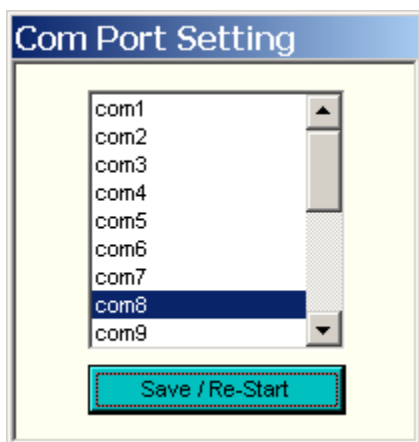
Com Port Setting

com1
com2
com3
com4
com5
com6
com7
com8
com9

Save / Re-Start

Figure 1.3

The Com port which is going to be selected is exactly same as the one shown on the Device Manager. Please refer to "Figure 1.2" for details. Then click "*Save / Re-start*" button to take the setting effective.

NOTE : The above operation is only needed for the first time of running the software. As long as the proper and correct Com port is selected and saved. There is no need to repeat this step.

For more details about how to use this testing software, please refer to the chapter III on this manual.

Chapter II
Bluetooth Connection

If Bluetooth connection is going to be used. Please follow the steps listed below:

NOTE: there are many kind Bluetooth adapters available on the market. The installation or pairing procedure with Bluetooth devices will be varying from them. We are taking a widely used Bluetooth adapter as the example.

❖ Power on N330 without USB cable attached

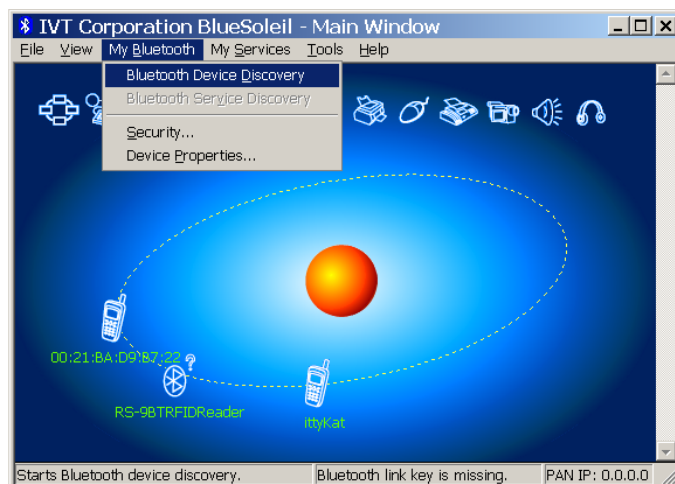❖ Enable the Bluetooth Management Tool and select the "*Bluetooth Device Discovery*" in the main menu

IVT Corporation BlueSoleil - Main Window

File View My Bluetooth My Services Tools Help

Bluetooth Device Discovery
Bluetooth Service Discovery

Security...
Device Properties...

00:21:BA:D9:87:22

RS-9BTRFIDReader   ittyKat

Starts Bluetooth device discovery. | Bluetooth link key is missing. | PAN IP: 0.0.0.0

Figure 2.0

❖ The Bluetooth adapter should be able to find a external Bluetooth based device called "*RS-9BTRFIDReader*". See figure 2.0

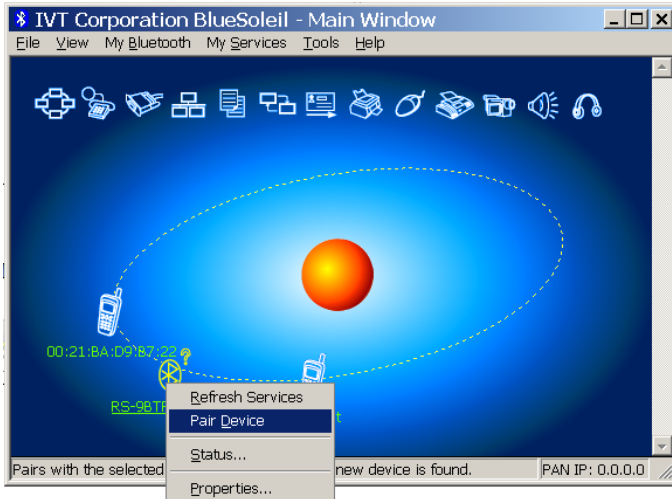❖ Right click on the icon of "*RS-9BTRFIDReader*" then select "*Pair Device*"

Figure 2.1

❖ Type in the passkey in the next popped up windows.
Then press "**OK**".
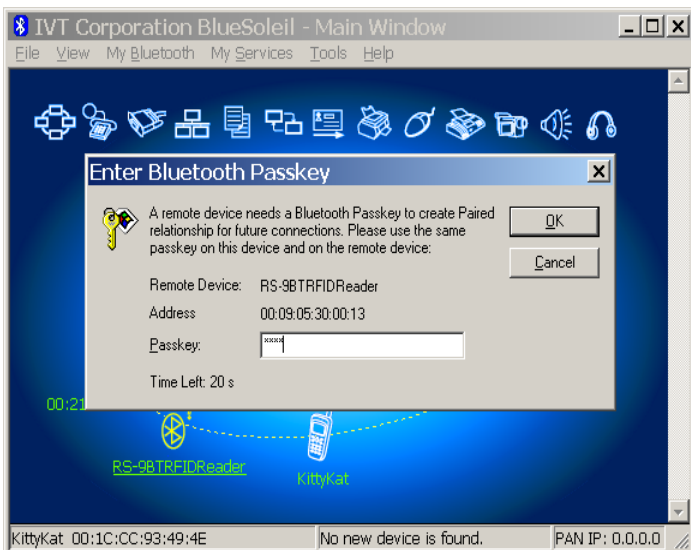The default Bluetooth passkey for N330 is "*1234*".
See the picture below:

Figure 2.2

❖ Then right click the same icon again, select "**Connect**"
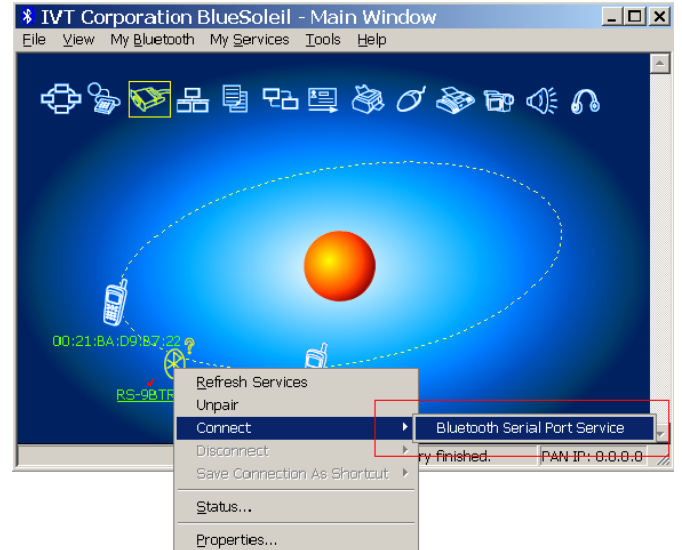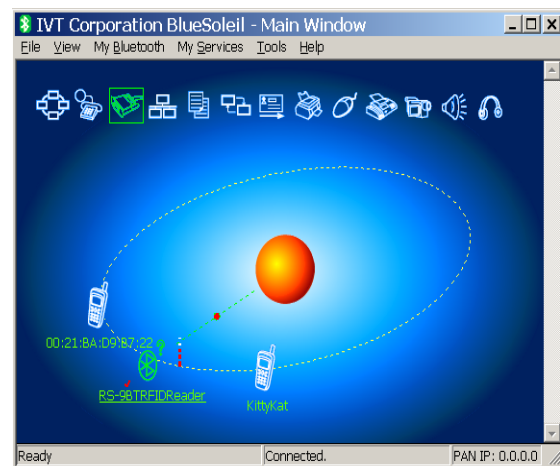->" **Bluetooth Serial Port Service**". See the following
Picture.

Figure 2.3

❖ At this stage, Bluetooth management tool will
automatically set up the wireless Bluetooth
connection with N330 via the Bluetooth interface.
Meanwhile, an specific serial port service information is
Shown on the system tray indicating that which Com port
Is being used for this Bluetooth connection.
See the following figure

" My Bluetooth COM Port 6 (COM6) is connected to remote device.

Figure 2.4

❖ The Serial Port information can also be obtained by Viewing the status of the connection –
Right-click on the icon of "*RS-9BTRFIDReader*" then select "*Status*". The specific serial port which is being Used is listed in there. See the picture below:
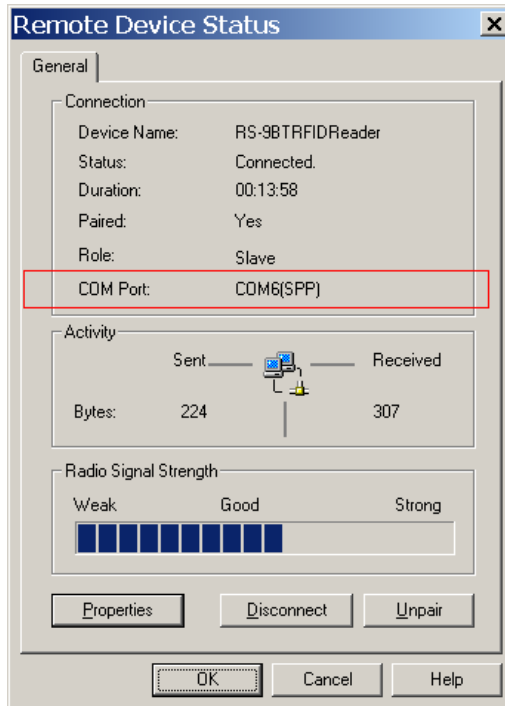

Figure 2.5

❖ Enable N330 application software, make sure the COM port is exactly same as the one shown on the "Figure 2.4" or "Figure 2.5"
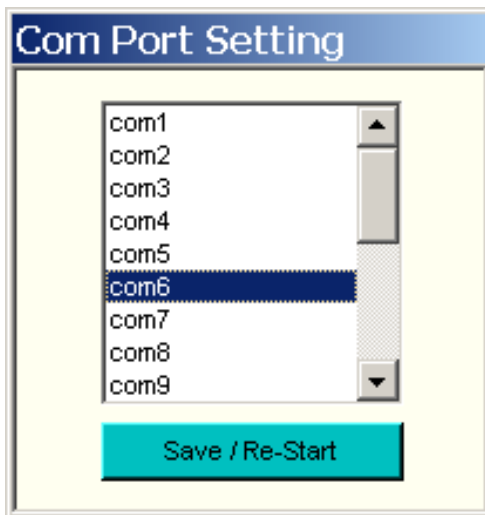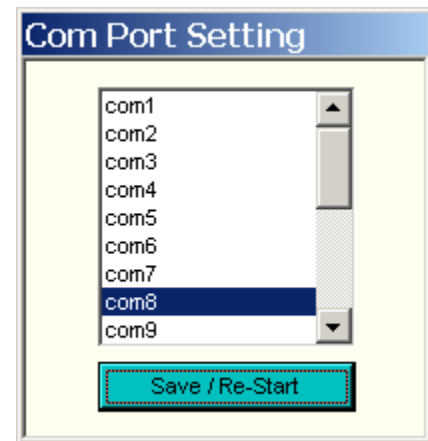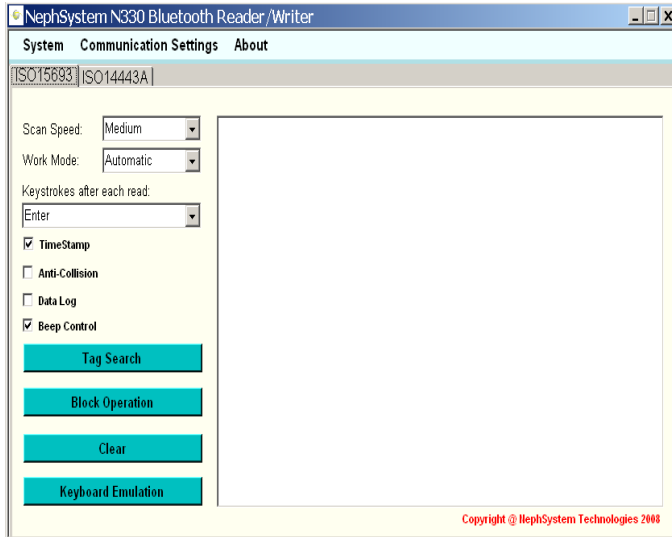

Figure 2.6

Chapter III
Testing Software Installation & Usage

❖ Make sure Microsoft's .NET Framework 3.5 is installed properly on the PC. Users may find the Framework 3.5 from the N330 product CD. Or go to Microsoft website to download.

❖ Put the product CD into CDROM, double click ""

❖ The default installation directory on the PC should be located at ""

❖ Go to "*C:/Program Files/NephSystem Technologies*", click on the "*N330PC.exe*"

❖ Double click "*N330*" to enter into the application software.

❖ For the first time of running this software, there is a Com port setting panel will be automatically popped up and users need to manually assign the proper Com port to the software. See the picture below.
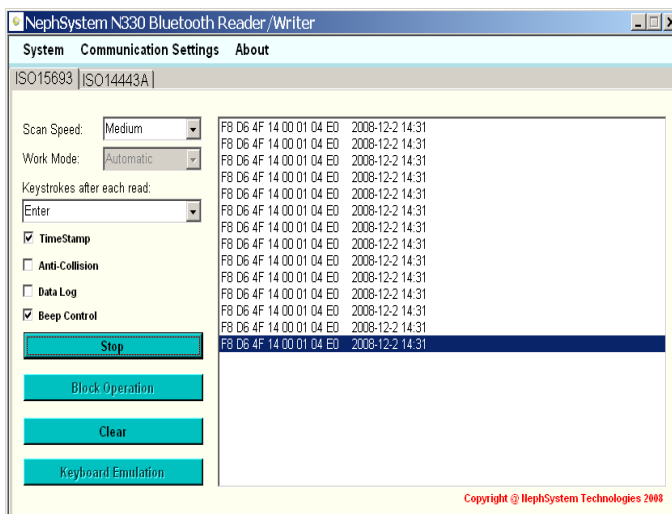

❖ The Com port which is going to be selected is exactly same as the one shown on the Device Manager. Please refer to "Figure 1.2" for details. Then click "*Save / Re-start*" button to take the setting effective.

❖ Power on the reader and re-start the "*N330PC.exe*". The main panel of the testing software will pop up and the N330 reader will be connected with the PC via the Bluetooth COM port or the USB port. See the following picture for details

- N330 is compatible with both ISO14443A and ISO15693 standards. Users should be able to see two separate tabs (ISO15693 or ISO14443A) on the panel.

- Put an compatible RFID tag (e.g. ISO15693 standard), press the "**Tag Search**" button. Tags' IDs will be viewed on the display area.

Scan mode or Push Button scan mode. Users might choose either one of them when testing.

- **Time Stamp**
  Enable/Disable time stamp when testing
- **Anti-Collision**
  Enable/Disable repeat scan for same tags
- **Data Log**
  Tested tags' data can be saved to a local file on the PC automatically. The default location of log file is located at the default installation folder.
- **Beep Control**
  Enable/Disable beeping function when testing
- **Tag Search**
  Start/Stop reading RFID tag's ID
- **Block Operation**
  Write/read blocks content (for ISO15693 only)
- **Clear**
  Clear the display area
- **Keyboard Emulation**
  When this function is enabled, the testing panel will be minimized to the system tray. And users may open any text editor, e.g. Notepad, Microsoft Word, Excel, Outlook, etc and view the data in the real time mode.

- **Scan Speed**
  The testing speed between two reads. There are three modes available: Slow, medium and Fast
- **Work Mode**
  N330 supports two working modes – automatic